

## NUMBER OF SPANNING TREES FOR SPLITTING OF SOME GRAPHS

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### Abstract

In mathematics, one always tries to get new structures from given ones. This also applies to the realm of graphs, where one can generate many new graphs from a given set of graphs. In this paper we derive simple formulas of the complexity, number of spanning trees of splitting of some graphs, using linear algebra, Chebyshev polynomials and matrix analysis techniques.

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Key Words : *Complexity of graphs, Number of spanning trees, splitting graphs, Chebyshev polynomials.*

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